Project Name: **Fiber Optic Harness Upgrade**

Customer: **Earth Sciences**

Date: **from 11/15/01 to 01/15/02**

Project team members:

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DESIGNWORKS

The Challenge

Earth Sciences Division is involved in a project to identify and provide solutions to fundamental issues surrounding single-well seismic imaging. This system consists of a hybrid Electrical / Fiber Optic cable with several mechanical connections that run along its 10,000 foot length.

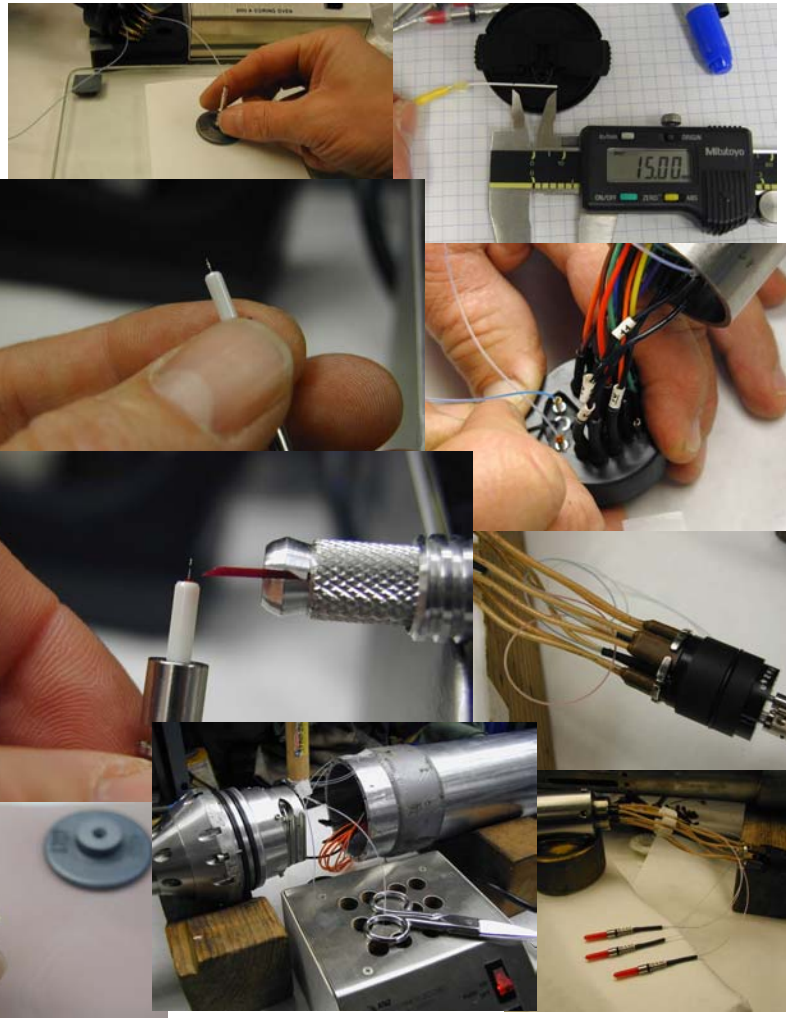
The Fiber Optic connections are sensitive to dust and bending forces. The termination of the hybrid connectors requires a high degree of skill and experience to produce a low-loss high quality connection. The cable is custom manufactured and assembly procedures were unavailable. Also, replacement components would not arrive in time to meet schedule. The cable upgrade and repair must be completed for a field test scheduled for early January, 2002.

The solution

Collect all data sheets, drawings and other documentation available on the custom cable. Develop the required skill and procedures to terminate the custom fiber optic connectors. Re-use existing components and improvise hardware and cable management solutions “on the fly”. Document the procedure and provide a manual for use in future cable repair.

The key to success

The DesigWorks team is made up of a diverse-multifunctional team that includes expertise in fiber optic hardware. These skills were used in quickly understanding the requirements and developing a plan that resulted in not only repairing the custom cable, but improving its performance.



S.Dellinges
6/25/02

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